FIGURE 1

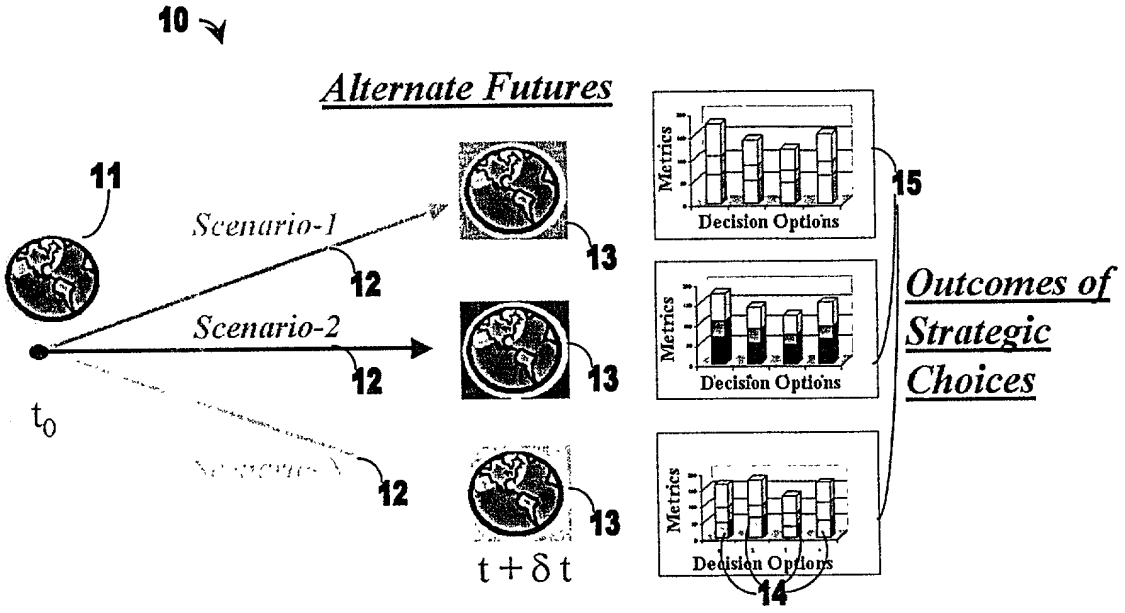


FIGURE 1A

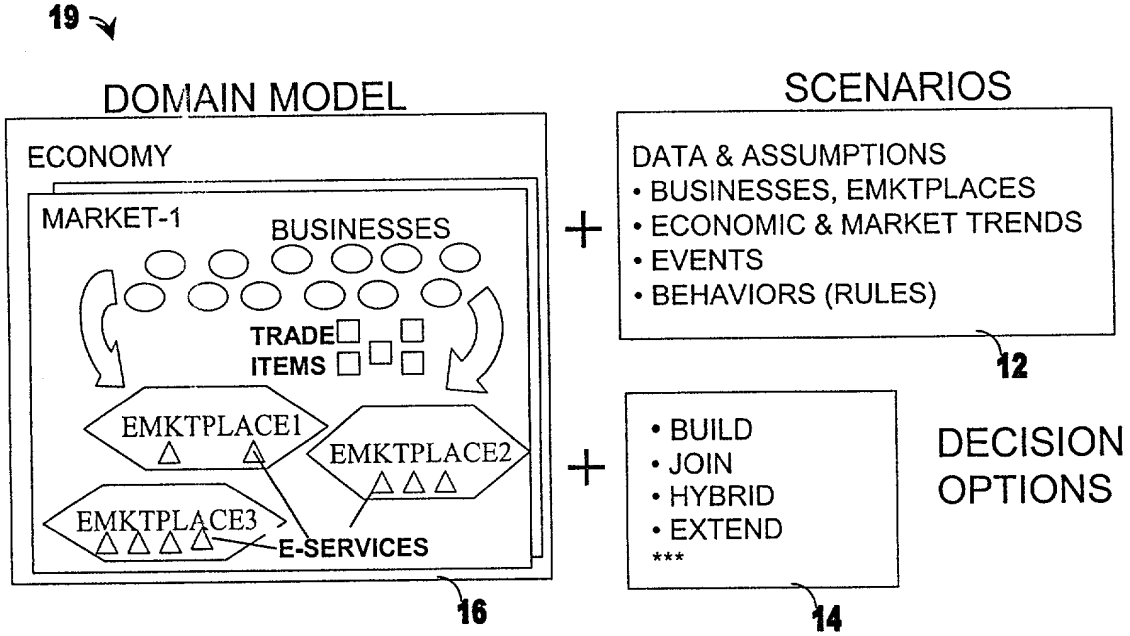


FIGURE 2

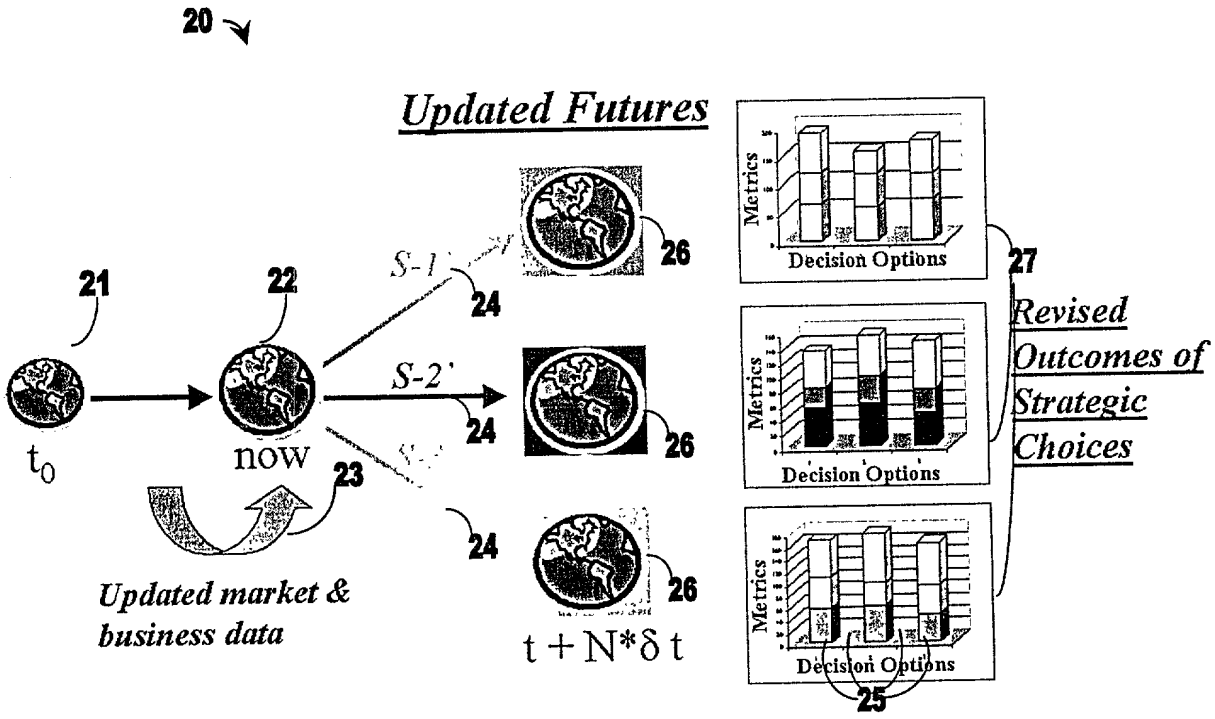


FIGURE 3

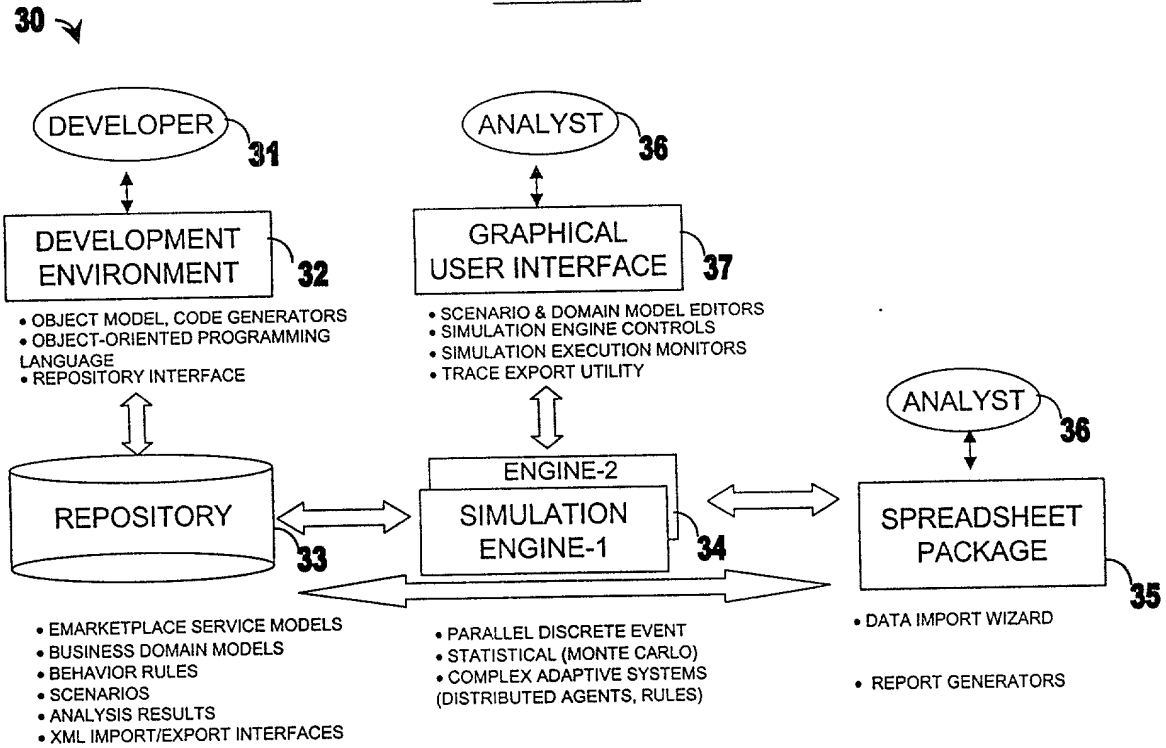
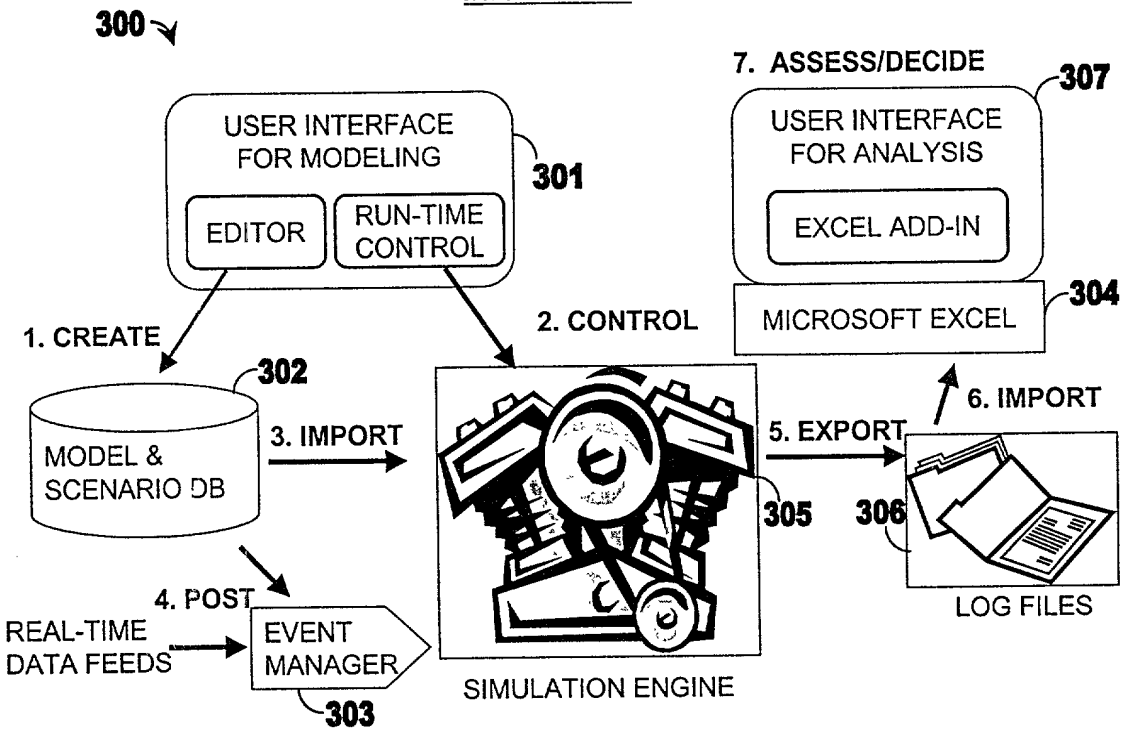


FIGURE 3A



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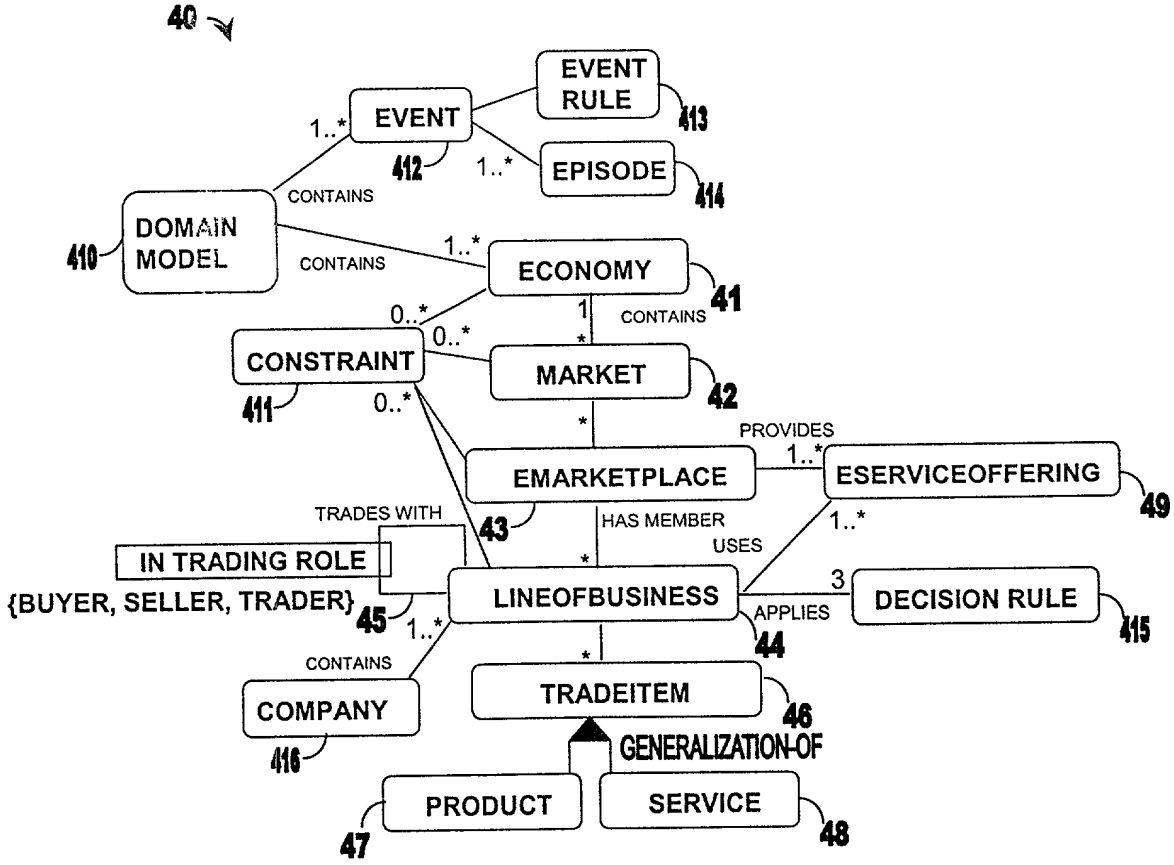

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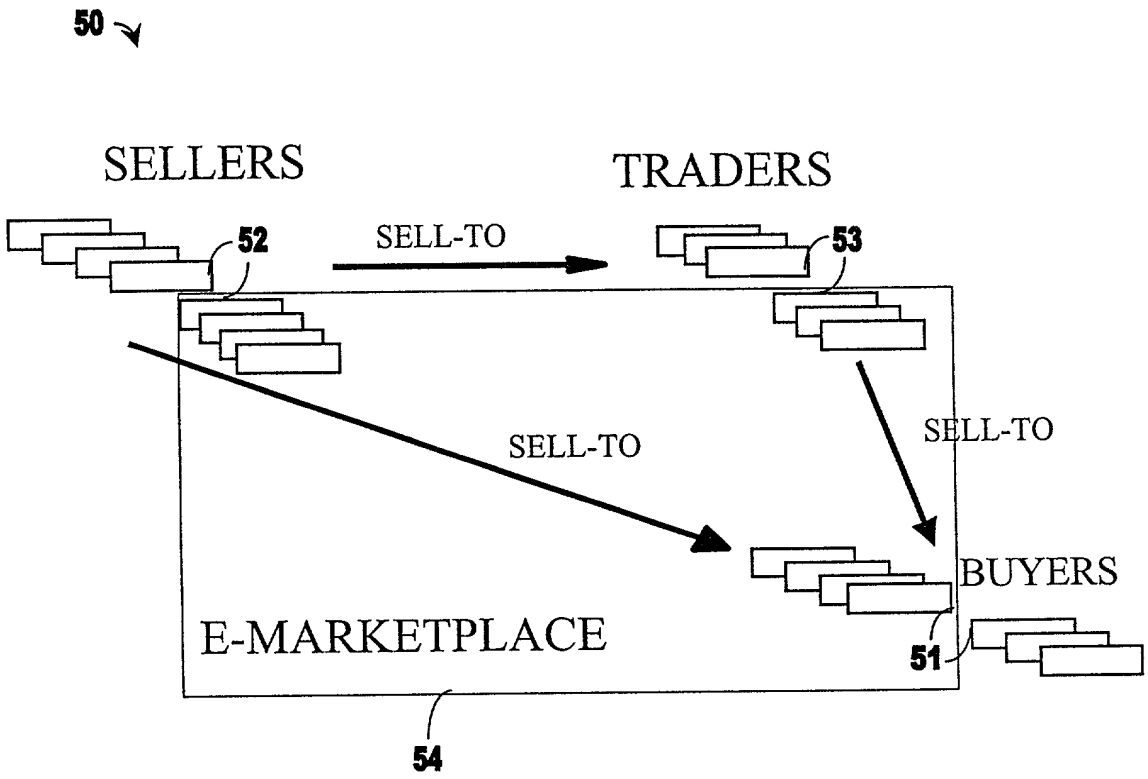
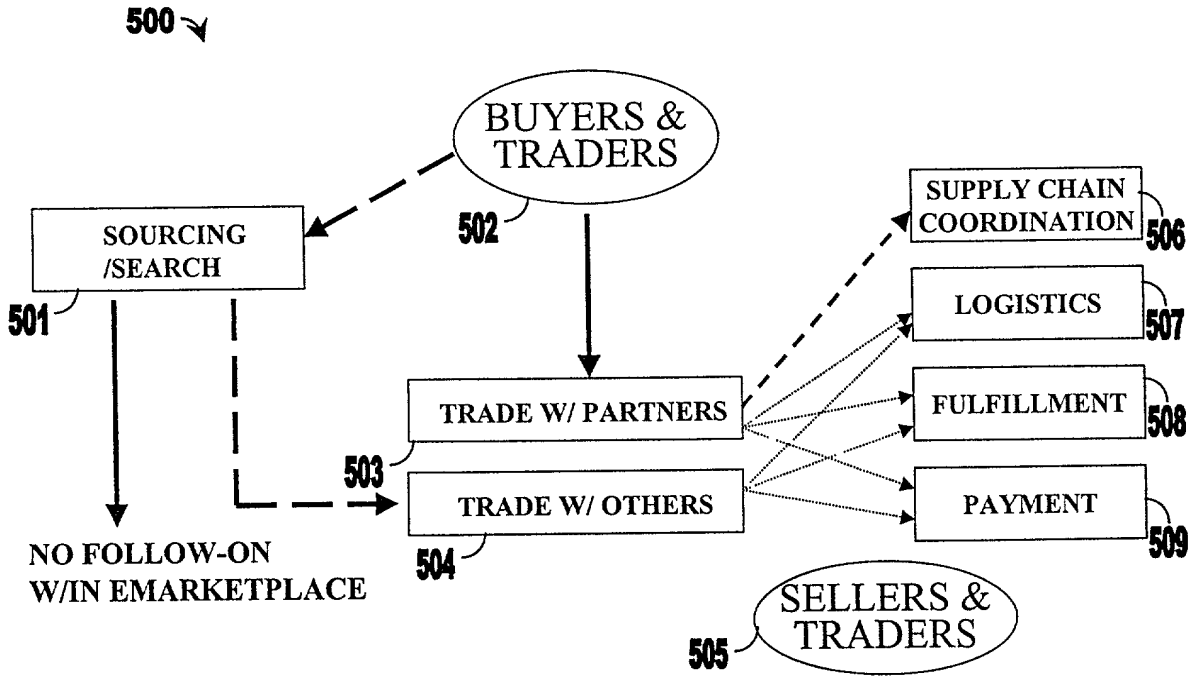


FIGURE 5A



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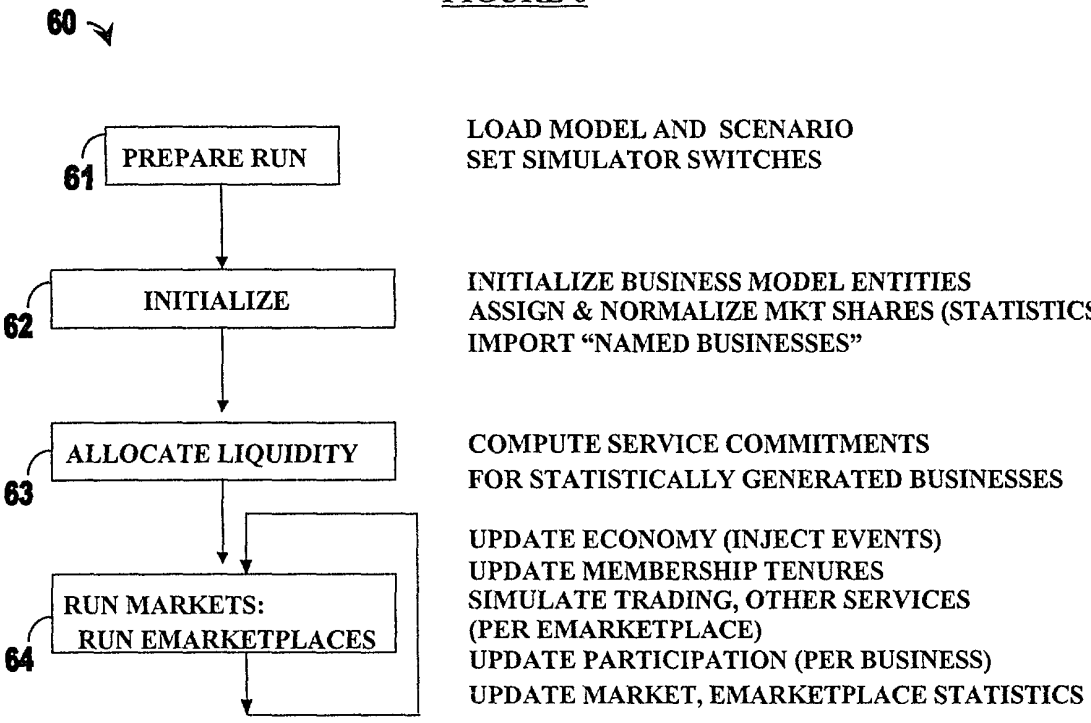

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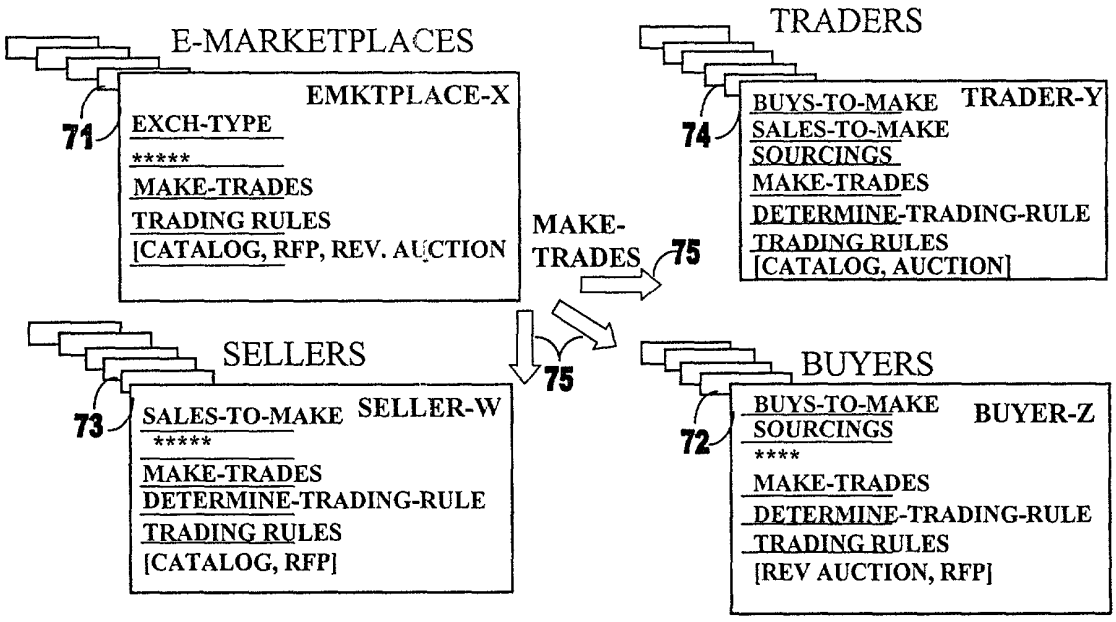

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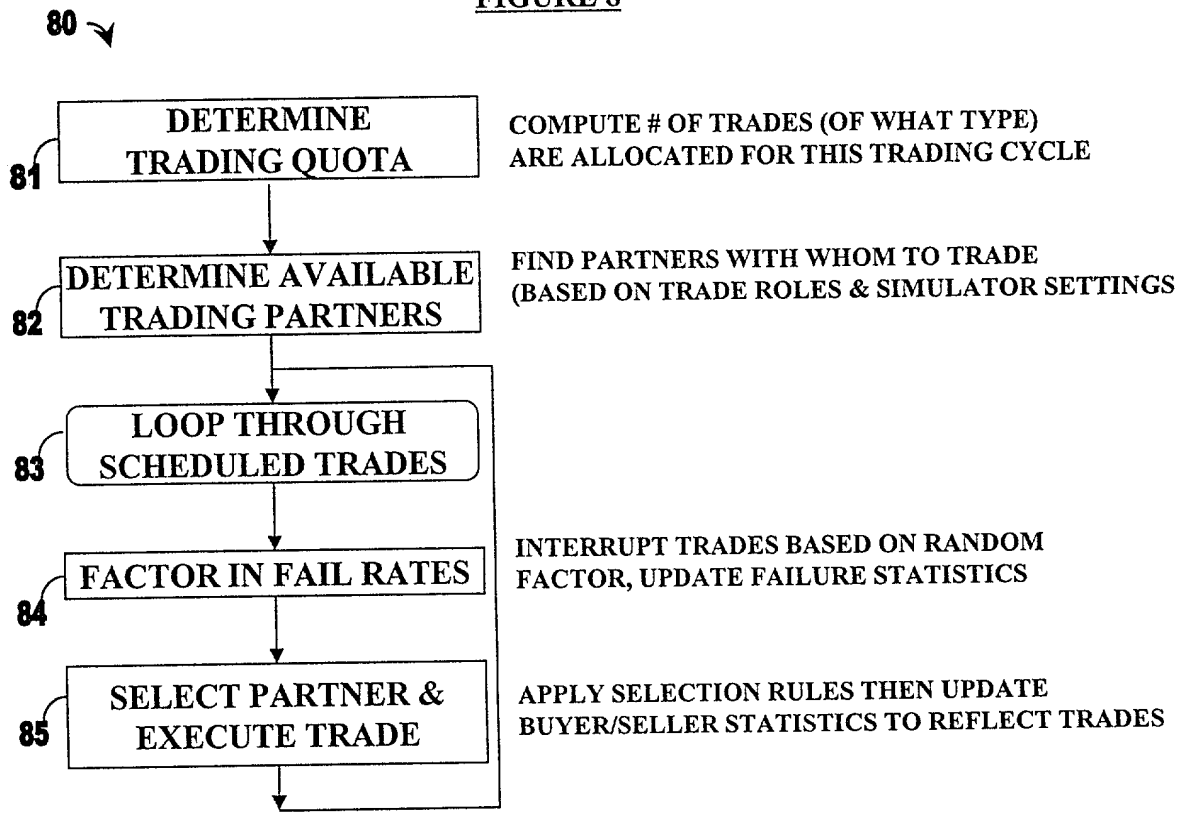


FIGURE 9

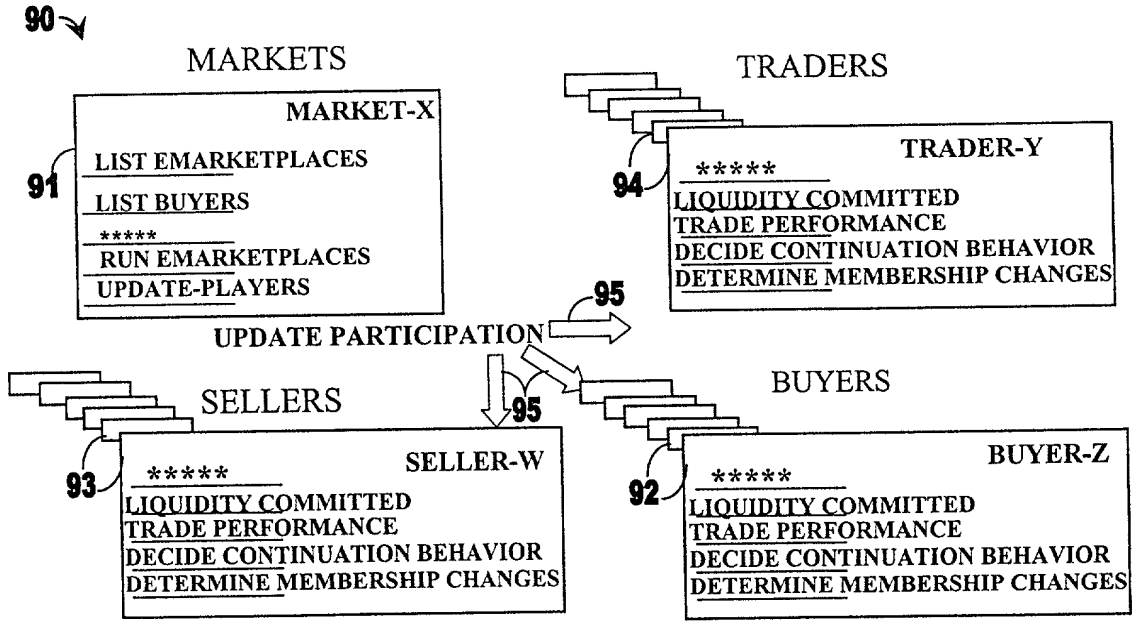


FIGURE 9A

Rules that (Simulated) Businesses apply to change their levels of participation in Exchanges

900

E-MARKETPLACE SERVICES			
DECISION OPTIONS	CURRENTLY SUBSCRIBED	AVAILABLE BUT NOT USED	NEWLY ADDED
NO CHANGE	X	X	X
INCREASE PARTICIPATION	X		
DECREASE PARTICIPATION	X		
SUBSCRIBE (AT SOME LEVEL)		X	X
WITHDRAW FROM EMKTPLACE	X	X	X

FIGURE 9B

Rules that (Simulated) Businesses apply to decide whether or not to join Exchanges

901

DECISION FACTORS	VALUES	WEIGHTS
MEMBERSHIP LEVELS		
TRADING LIQUIDITY		
CONTENT		
COMMERCE		
COLLABORATION		
COMMUNITY		
CUST REL. MGMT		
OTHER MODEL PARAMETERS		
DECISION FUNCTION = F(VALUE-X * WEIGHT-X		

DECISION OPTIONS
JOIN
RESULT < = THRESHOLD
NO CHANGE (DON'T JOIN)
RESULT > THRESHOLD

FIGURE 10

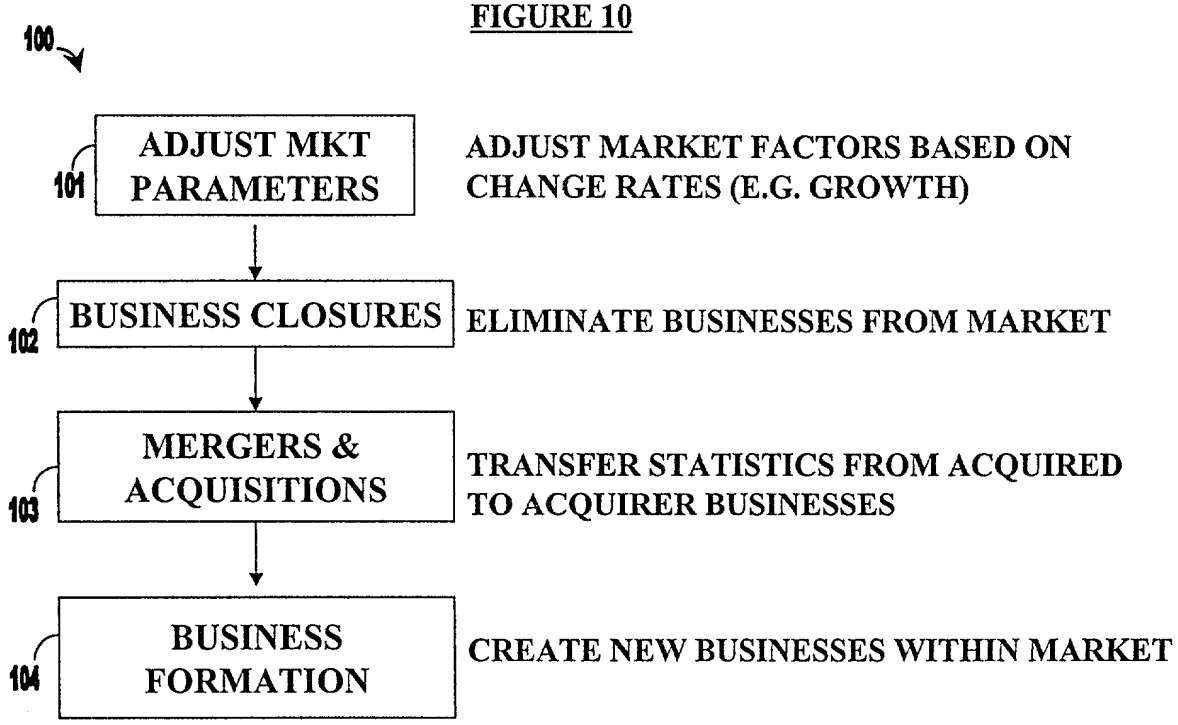


FIGURE 11

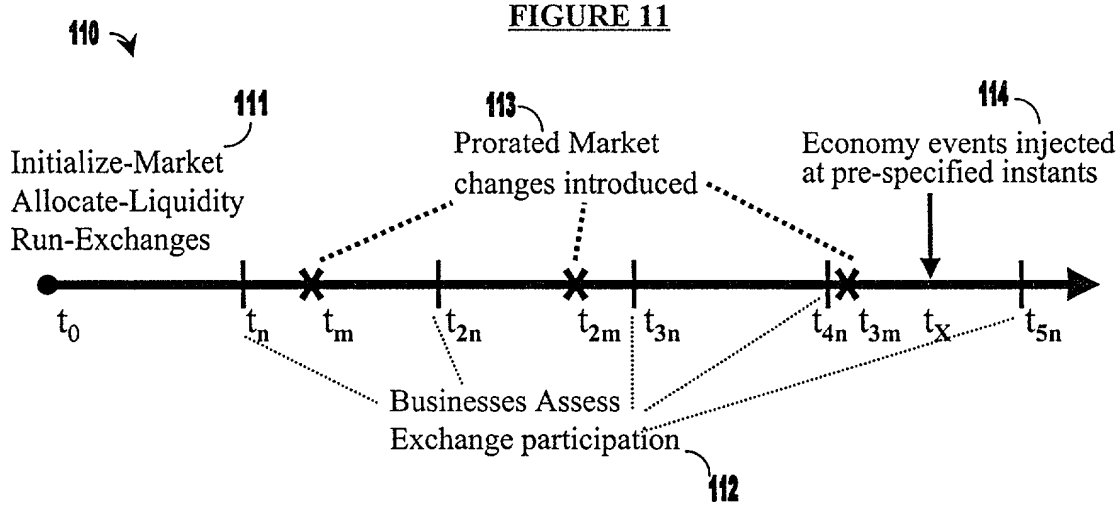


FIGURE 12

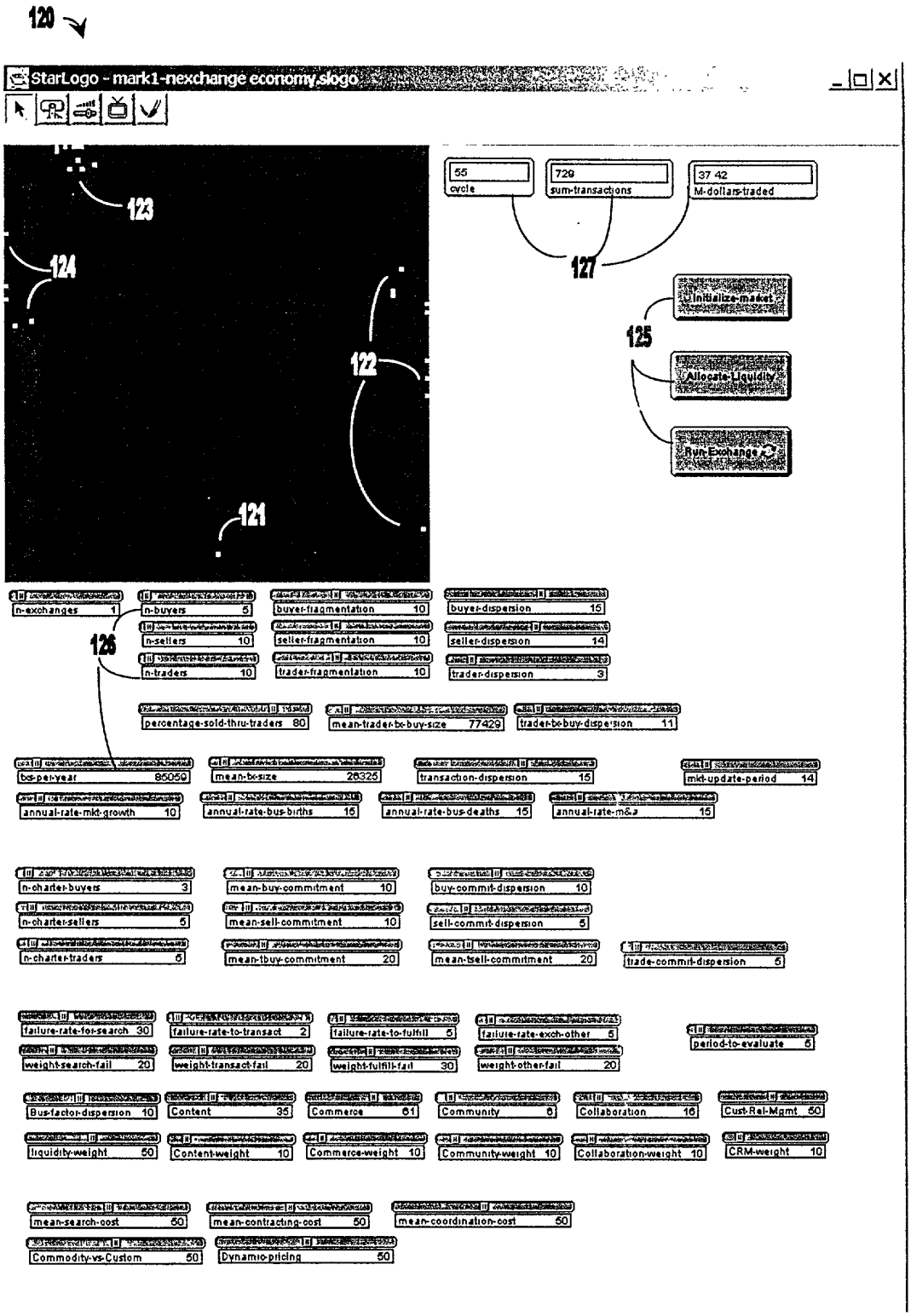

120
StarLogo - mark1-nexchange economy.slogo
123
124
122
121
55
cycle
729
sum-transactions
37 42
M-dollars-traded
127
Initialize-market
125
Allocate-Liquidity
Run Exchange
126
n-exchanges 1
n-buyers 5
n-sellers 10
n-traders 10
buyer-fragmentation 10
seller-fragmentation 10
trader-fragmentation 10
buyer-dispersion 15
seller-dispersion 14
trader-dispersion 3
percentage-sold-thru-traders 80
mean-trader-bc-buy-size 77429
trader-bc-buy-dispersion 11
bcs-per-year 86059
mean-bc-size 26325
transaction-dispersion 15
mkt-update-period 14
annual-rate-mkt-growth 10
annual-rate-bus-births 15
annual-rate-bus-deaths 15
annual-rate-m&a 15
n-charter-buyers 3
n-charter-sellers 5
n-charter-traders 5
mean-buy-commitment 10
mean-sell-commitment 10
mean-tbuy-commitment 20
buy-commit-dispersion 10
sell-commit-dispersion 5
mean-tsell-commitment 20
trade-commit-dispersion 5
failure-rate-for-search 30
failure-rate-to-transact 2
failure-rate-to-fulfill 5
failure-rate-exch-other 5
weight-search-fail 20
weight-transact-fail 20
weight-fulfill-fail 30
weight-other-fail 20
period-to-evaluate 5
Bus-factor-dispersion 10
Content 35
Commerce 61
Community 6
Collaboration 16
Cust-Rel-Mgmt 50
liquidity-weight 50
Content-weight 10
Commerce-weight 10
Community-weight 10
Collaboration-weight 10
CRM-weight 10
mean-search-cost 50
mean-contracting-cost 50
mean-coordination-cost 50
Commodity-vs-Custom 50
Dynamic-pricing 50

FIGURE 13

130

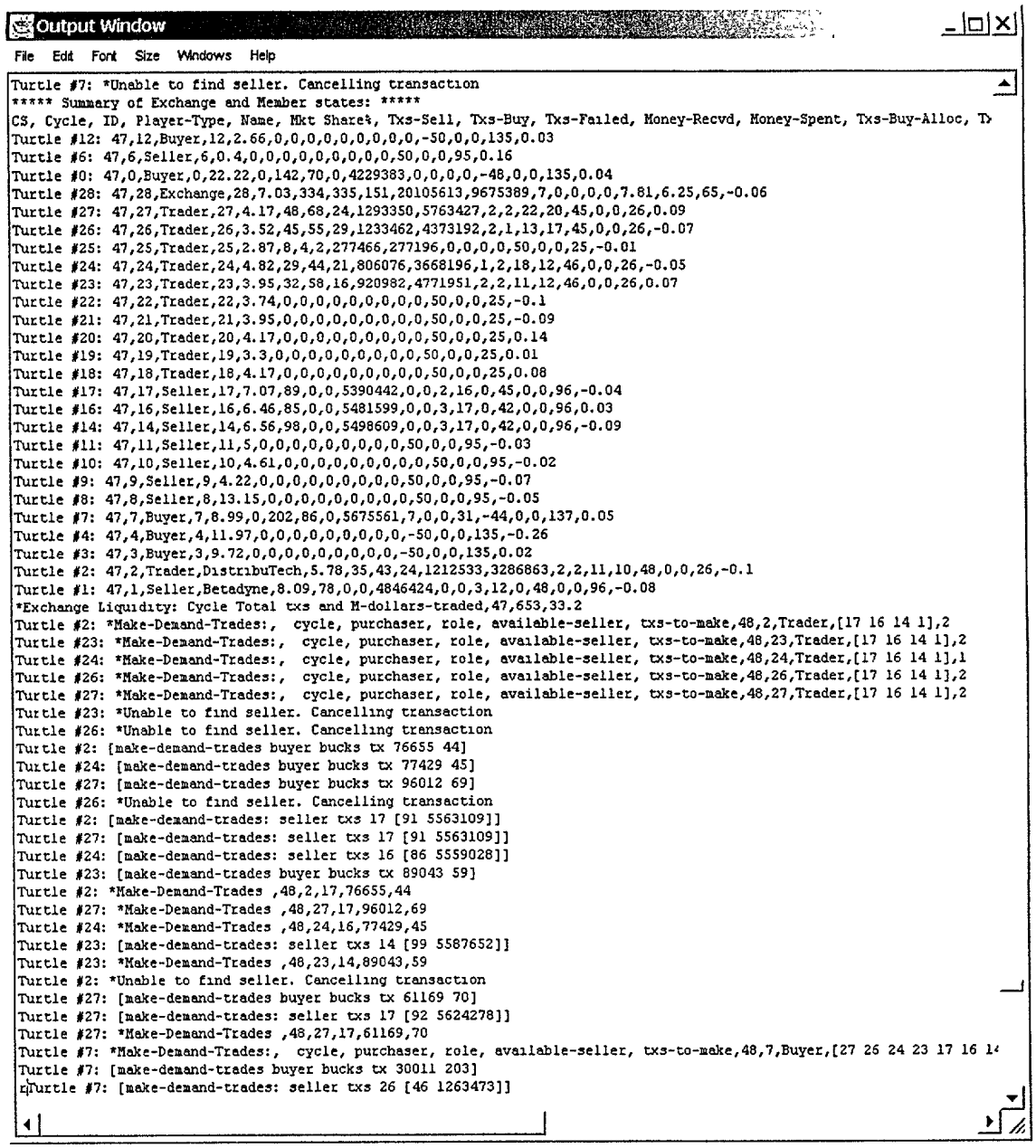


FIGURE 14

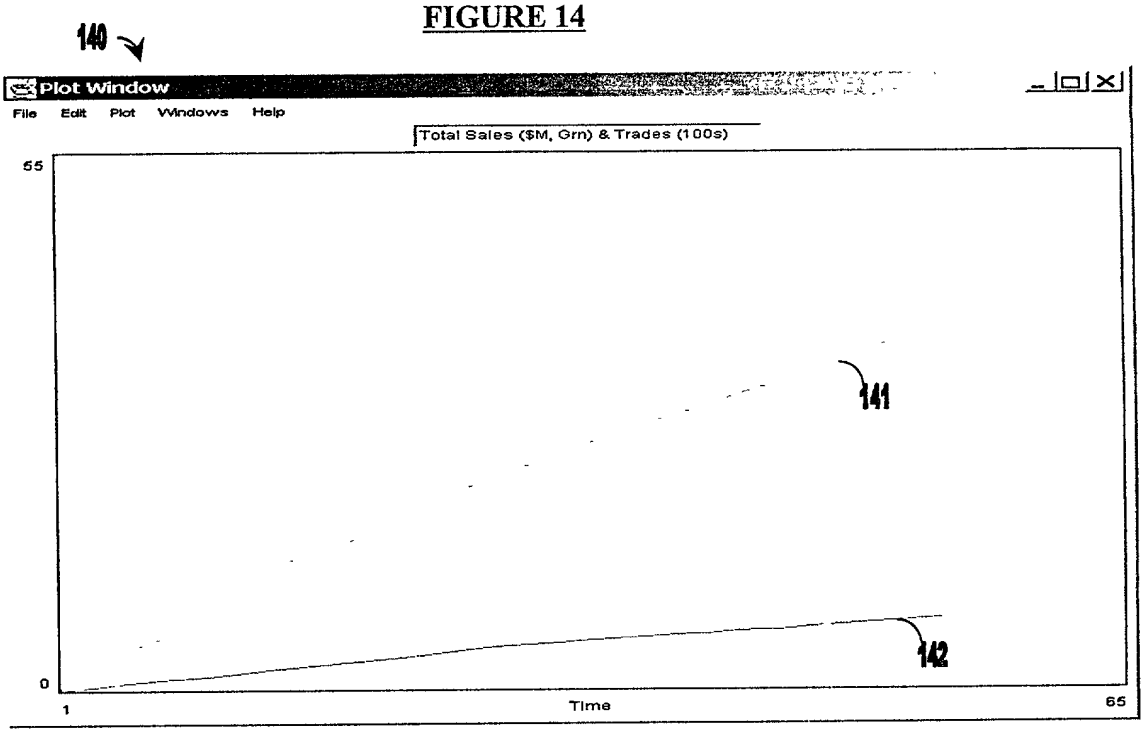


FIGURE 15

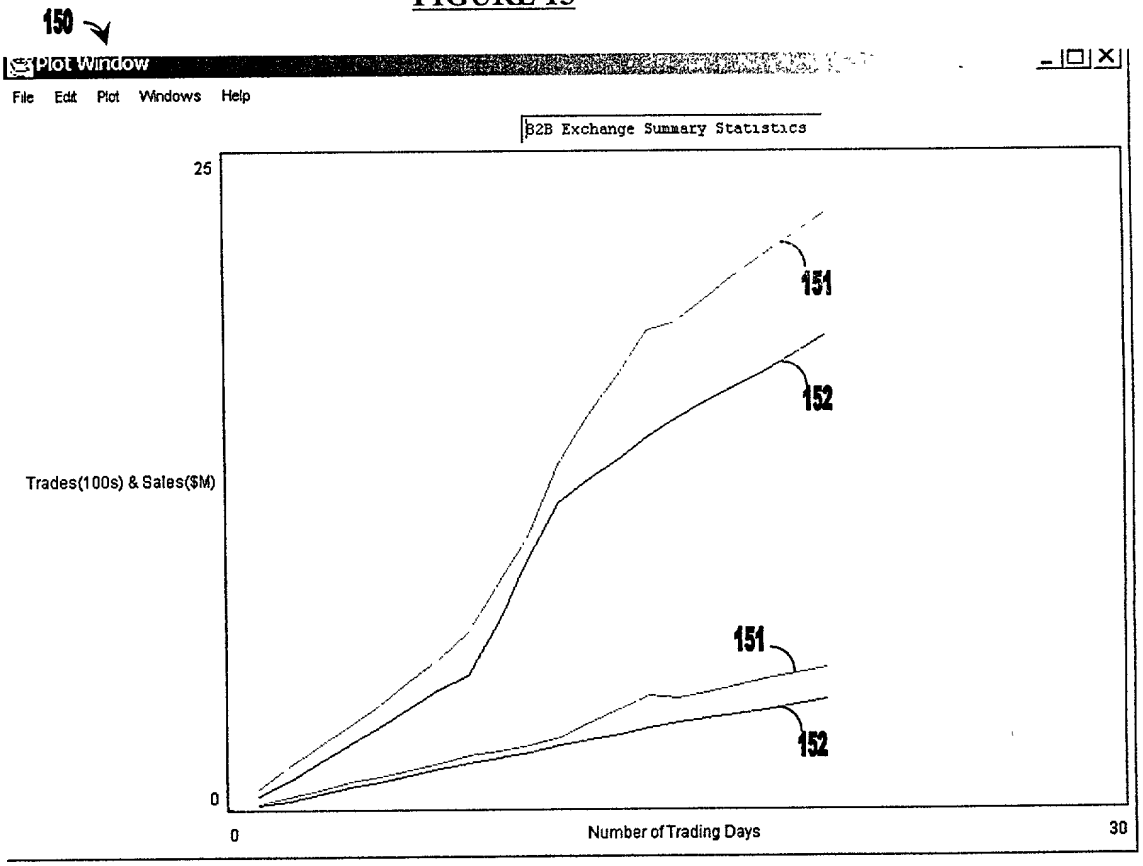
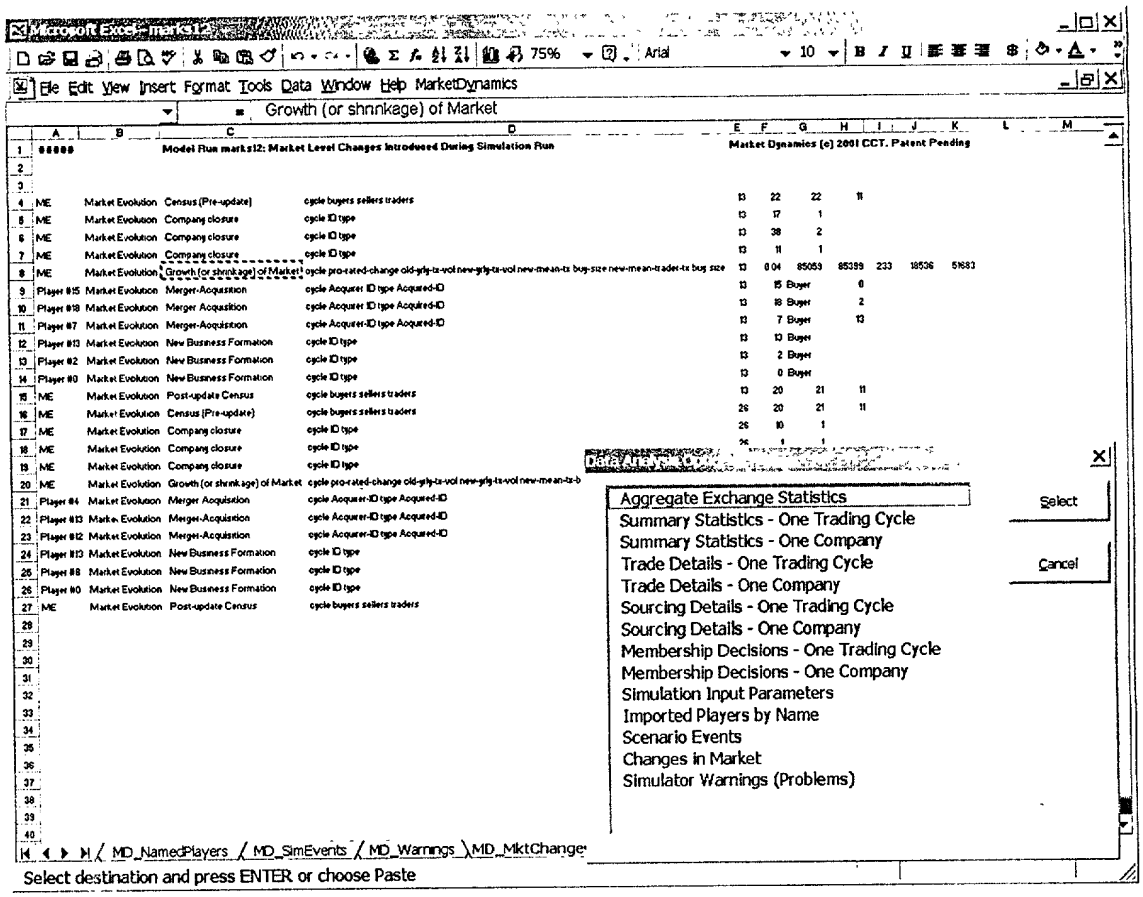


FIGURE 16

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